

Hell on Wheels

by Jack Hope

A new wave of bigger, faster machines is driving Americans from the wilderness.



At 8 a.m. on a November Saturday, it's silent enough in Ohio's Wayne National Forest that Larry Steinbrink and I can hear falling oak leaves as they settle to the forest floor. Alongside the dirt trail leading us up a hardwood ridge, a woodpecker hammers methodically on the trunk of an ancient beech tree. Once we cross the ridge top we can hear the murmur of Purdum Creek somewhere below us as it spills over a sandstone ledge.

"This is the way a forest ought to sound," says 71-year-old Steinbrink, a lifelong outdoorsman from nearby Carbon Hill. "But let's just wait here and see what happens. In a little while it'll be a totally different place."

Within 10 or 12 minutes, just as Steinbrink predicts, there's a strange series of burbling and popping noises from the bottom of the eroded half-mile trail we've just ascended. At first it sounds to me like the death throes of a giant automatic coffeemaker. But the distant burbles and pops quickly become the ever-louder snarls and blats of internal combustion engines as a group of off-road recreational vehicles (ORVs) begin their charge up the steep switchback trail.

First to appear, dirt and gravel flying from beneath their rear wheels, blue smoke streaming from their tailpipes, are a trio of goggled, helmeted "dirt bikers" wearing padded, body-length, leather-and-nylon racing outfits. As the motorcyclists climb the trail, the roar of their two-cycle engines fills the steep-sided valley. They leap their 250-pound machines over clumps of exposed hardwood roots, sink almost out of sight as they grind through the three-foot-deep ruts of the switchback turns, then accelerate fiercely on the straightaways, splatting mud onto the tree trunks and onto the riders who follow them.

Less than 50 yards behind, five all-terrain vehicles (ATVs) rumble up the slope. They're chunkier (about 500 pounds), slightly slower, and far less graceful than the dirt bikes. But these machines -- America's favorite off-road vehicles -- have four-wheel drive and impressive climbing ability. Three of the ATV riders stay on the trail. Two leave it (illegally), speeding 80 yards off into the forest in search of a new, and more challenging

route up the ridge. They dive into a gully and churn axle-deep through the wet soil in its bottom, whipping it into the consistency of pancake batter. They whoop exuberantly as they dash up its far side, then pivot and run back through the gully a second and third time. Zigzagging swiftly upslope, they spray earth and leaves eight feet into the air. Near the top, they gun their engines up a short, impossibly steep rise. Their tires grip, tearing out small chunks of moss and soil. Then they sprint another 15 feet to rejoin the main trail.

When they overtake Steinbrink and me at the crest of the ridge, the mud-splattered riders are clearly surprised to see human beings on foot. Behind goggles their eyes make quick, startled movements, but they skillfully swerve their front wheels to avoid clipping us on the narrow trail as they flash by at 30 miles an hour.

Then they're gone, disappearing around a downhill turn into Purdum Hollow. In their wake there's a mixed smell of oil and gasoline. My ears don't seem to be ringing, but for one reason or another, the sounds and the silence of the forest momentarily vanish. Before the noise of their engines fades, we hear another pack of ORVs at the foot of the trail, revving up.

"I used to love comin' here," Steinbrink says, planting his sassafras walking stick ahead of him as we proceed along the trail. "If I came in early, I'd always see a deer or a partridge, maybe even a fox. If there were other hikers around you'd never hear them, even in dry leaves. You could spend the whole day in these woods and imagine you were the first person ever to see them. But now the Forest Service has built trails for the vehicles and they've turned it into a racetrack. The ground is all tore up and there's oil and beer can slayin' around. It isn't a forest anymore. As soon as I hear the first of those engines, I know I'm not gonna see or hear anything natural the rest of the day."

Raised during the Depression on a subsistence farm just down the road from here, Steinbrink has spent his life in intimate contact with the 236,000-acre Wayne National Forest. As a boy, he fished in its creeks, hunted gray squirrels in its beech groves, and, as a volunteer from Carbon Hill High School, fought forest fires and planted pine seedlings on its hillsides. He's harvested firewood and mushrooms and yellowroot in the forest, run his coonhounds, searched out wild bee trees, and, over 60 years, explored virtually all of its hollows and ridges.

But during the last decade or so, Steinbrink says, he's been forced to surrender many of his favorite haunts to the off-road recreational vehicles. "There's five times as many of them as there were 10 years ago. They just blaze their own trails wherever they want. When I see them up in Possum Holler I say, 'Hey, you guys are a good mile from any legal ORV trail!' But they just give me the finger. The Forest Service can't stop them, and there's no place I can go to get away from them."

Every weekend, from the suburbs of Columbus and Cleveland and Cincinnati, hundreds of big-bed pickup trucks and trailer-toting SUVs pour onto the narrow dirt roads of Wayne National Forest, each of them hauling two or three ATVs or a half dozen dirt

bikes made by Suzuki, Honda, Polaris, Yamaha, and Kawasaki. It's virtually an all-male crowd, ages 13 to 55, with only a handful of girlfriends and wives who faithfully tend the charcoal fires and microwave ovens, awaiting return of their men from a day of hard riding.

They come here to the southeastern corner of Ohio because, in an otherwise flat state, the gnarled Appalachian landscape provides the kinds of challenges to man and machine that ORV riders relish -- steep slopes to climb, streams to ford, hillocks to leap, mud to splatter, hairpin turns to maneuver, and 40-yard straight-aways where a Yamaha 250 can crank up to 60 mph.

It isn't a sport without thrills, I discover, riding as a passenger on 14-year-old Caleb Winfield's dirt bike and, later, driving 41-year-old Dan Avery's ATV at Dorr Run. (Since both these riders let me ride their machines illegally, I've changed their last names.) But, except on the level, I'm terrified riding these open, unprotected machines. Cresting a ridge or speeding downhill, I have the same paralyzing fear I experience in a roller coaster when the earth disappears and I'm about to hurtle into space. And my fear is not unjustified; every one of the two dozen riders I talk with has broken an arm, leg, rib, or collarbone by smashing into a tree, a boulder, or another rider or by taking a self-sacrificing spill to avoid flattening an unexpected deer hunter.

The riders make no pretense that their sport has anything to do with nature or the outdoors, except as a series of topographic obstacles." The scenery is irrelevant," says Avery. "You're moving fast. Half the time you're in dust so thick you can't see 10 feet. All you can do is focus on your front wheels."

Today, from the Florida marshlands to the Rocky Mountains to the Alaska tundra, millions of off-road-vehicle riders regularly recreate on public land. To hear the riders tell it, full-tilt ORV sports represent the ultimate in personal freedom. But for the nation's nonmotorized outdoorsmen and for state and federal land managers, the popularity of off-road recreational vehicles has created problems never before seen in the American outdoors.

Technically, any engine-powered machine used off-road -- whether it's a motorboat or the family sedan -- qualifies as an ORV. But the list of the most problematic factory-made vehicles, usually built for only one rider, includes dirt bikes and all-terrain vehicles, along with their wintery and watery counterparts, snowmobiles and personal watercraft, often called by the brand name Jet Skis. (Sport-utility vehicles are surely capable of modest off-road travel, but, as everyone knows, their owners seldom use them farther off-road than the nearest shopping mall.)

The defining feature of all these machines, their critics say, is that they are thrill vehicles (or "crotch rockets"), used not to transport passengers innocuously from point A to point B in the outdoors -- as, for example, a tour guide's van might be -- but for the rigors and excitement of the ride itself. "ORVs are built, advertised, and used for speed and competition," says Bethanie Walder, executive director of Wildlands CPR, a Montana-

based environmental group. "We don't say they should be outlawed, but if you want to ride a vehicle on public land, you should be on a road. If you want to get off the road, you need to get off your vehicle."

Here in Wayne National Forest, the U.S. Forest Service in the mid-1990s built off-road-vehicle riders a 118-mile trail system of their own, leading through roughly 26,000 acres of public land. In digging new, wide trails for the vehicles, the Forest Service attempted to include all the twists, turns, and climbs ORV riders appreciate. It built new trailhead parking lots for their trucks, motor homes, and SUVs.

At the same time, the agency took steps to limit the land damage caused by the heavy, tire-spinning vehicles and to keep them away from the forest's traditional hikers, hunters, campers, and horseback riders. It built dozens of rugged wood and steel ORV bridges across creeks, added concrete reinforcing rods and thousands of tons of gravel to "harden" its dirt trails, and erected metal gates and wooden fences to block ORVs from entering the 210,000 acres of Wayne National Forest where vehicular travel is prohibited. The Forest Service also clearly marked its ORV routes with hundreds of formal wooden signs and with thousands of orange metal patches nailed to tree trunks, and it issued a legal order requiring that the machines stick strictly to those trails.

But it's clear at a glance that the agency's attempts to control the vehicles are regularly and illegally thwarted. At a Forest Service bridge across Purdum Creek, I watch while 14 out of 22 ORV riders reject the bridge and instead plunge through the streambed immediately alongside, because it's a chance to spray water and mud. At Dorr Run and the South Woods, I observe half dozen places where Forest Service signs -- "Closed. Not a Designated Trail" -- have been broken off their posts or riddled with bullets, and I see fences and gates that have been smashed down by riders to gain access to areas of the forest that are off-limits to them.

"They get bored with the kind of trail experience we're offering and they wander off," says Mike Baines, former Wayne District Ranger who now works in the Monongahela National Forest in West Virginia. "But when one ATV rider wanders off an established trail the next rider and the next will see his ruts and follow him; and then you've got a brand-new trail. If we give a \$50 summons to the fifth or sixth illegal rider that day, he'll say, 'Hey, why? I'm just following an existing trail!'"

Nationwide, land-managing agencies ranging from the Forest Service to the U.S. Bureau of Land Management, the National Park Service, and the U.S. Fish and Wildlife Service, which together administer more than 625 million acres of public land, openly acknowledge that they do not have the money or manpower to protect the American outdoors and the non-motorized public from year-round incursions by today's potent off-road vehicles. If they completely close their borders to ORVs, land managers say, the riders will enter anyway and churn up the landscape at will; there's no fence or gate or law that will keep them out.

But if they accommodate the machines by specially building them 50-inch-wide and hardened vehicular trails, ORV riders simply use their new trails as jumping-off points to illegally penetrate even farther into an area's fragile backcountry. Every year these machines push just a bit deeper into the wilds -- up to Anderson Pass in Denali National Park, into Georgia's Rich Mountain Wilderness and the northwest corner of the Arctic National Wildlife Refuge. "The poorly managed use of off-road vehicles in Alaska results in more physical deterioration of wild areas than all other uses combined, aside from clear cutting," says Ray Bane, a former superintendent of Katmai National Park in Alaska. The illegal riders are almost never caught, not just because their machines are speedy but also because, on public land, an individual ranger or forester is typically assigned to patrol an impossibly large area, anywhere from 125,000 to 2.5 million acres.

In an effort to induce ORV riders to confine their most land-damaging activities to a relatively small area, dozens of state and federal land managers from Georgia to Illinois to Oregon to Alaska have, off the record, adopted a policy of designating "sacrifice areas"-- riders call them "play areas" -- so enthusiasts can charge up and down slopes, through streams, across desert and marshes to their heart's content, utterly pulverizing large areas of public land. The hope is that this policy will displace the behavior from wild and more scenic areas nearby.

In small numbers, factory-made ORVs began to appear on public land in the 1950s and 1960s. The very first was the dirt bike, followed by the snowmobile and dune buggy. The ATV and Jet Ski came along roughly a decade later. Since they were brand-new, previously undreamed-of creations, there were no specific rules in place to govern their use. Land managers tended to regulate them only casually, typically closing their most environmentally sensitive areas to them but giving tacit approval to use them most anywhere else within a state park or national forest, providing they stayed on existing vehicular routes. And for the most part, that worked. "Forty years ago, there were only a handful of off-highway vehicles, and they were these clumsy 17-horsepower things that constantly broke down and couldn't handle deep snow or rough terrain," says Mike Finley, former superintendent of Yellowstone National Park. "If we told them not to wander off roads or harass wildlife they didn't, because they couldn't. And it was with that perception that the National Park Service naively permitted snowmobiles in Yellowstone, beginning in 1963."

But during roughly the last dozen years the design and engineering of all off-road vehicles have improved dramatically. They've evolved into high-power machines with superb traction, suspension, and cushioning features that make them vastly easier to handle and ride than their predecessors. The ATV metamorphosed from a tippy and dangerous three-wheeler in the 1970s to a more stable four-wheeler, or "quad," by the 1990s. The early snowmobile, which sank out of sight if it ventured off pre-packed trails, transformed into a 70-horsepower machine that skims across the deepest powder at 90 mph.



Riders motor down a forest trail made for ATVs. In 2002, Americans bought 825,000 of these vehicles, which start at \$5,000.

Due to the design improvements, along with the prosperity of the 1990s, annual sales of off-road vehicles quadrupled from 350,000 machines in 1990 to 1.4 million by 2000, with most of the increase coming from sales of all-terrain vehicles. The machines are not inexpensive: An AT starts at around \$5,000; a dirt bike, \$3,000; a Jet Ski, \$7,000; and a snowmobile even more. But a dimension of the machines' popularity, manufacturers say, is their new appeal to distinctly middle-class Americans with family incomes in the neighborhood of \$70,000.

Operating with casual, 40-year-old ORV policies or, in some cases, operating with no policy at all, state and federal land managers were caught flatfooted. "At the BLM we were overwhelmed not only with the abilities of the new vehicles but also with their demographics," says Jim Keeler, national off-highway vehicle coordinator for the Bureau of Land Management. "I was an early dirt biker myself. But I had no idea-- no one did -- that we'd see so many people riding these machines today."

Just as their manufacturers claim, today's off-road vehicles can conquer almost any natural landscape, from swamp to stream to mountain slope. "Fifteen years ago, American wildlife had long periods of quiet isolation from human beings because distance, weather, and terrain made it difficult for most of us to reach them," says Gayle Joslin, wildlife biologist for Montana's Department of Fish, Wildlife and Parks and co-coordinator of a 1999 study, "The Effects of Recreation on Rocky Mountain Wildlife." "But that's all changed. Now, there's no season of the year wildlife isn't under persistent stress from riders on machines. When a cross-country skier goes into the forest he travels only five or six miles before he gets pooped and turns around," Joslin adds. "Wildlife can easily evade him because he's moving slowly. But snowmobilers roar along at 20 or 30 miles an hour, and their vehicles never get tired. Fifteen minutes from the highway, they're deep enough in the forest to panic a wintering herd of elk and take a couple of noisy turns around them to get a closer look. A half hour later they're high up on a ridge, terrifying a herd of mountain sheep or a wolverine giving birth to her kits. When they leave they take a different route down the slope to where their truck is parked and panic a whole different set of animals."

While much of the damage caused by today's ORVs is innocent or inadvertent, most land managers have no doubt that aggressive lawbreaking is increasing, due to the new

potency of the machines. "It's like putting a Corvette in somebody's hands, then expecting him to obey a 35-mph speed limit," says John Donahue, former superintendent of Florida's 720,000-acre Big Cypress National Preserve.

The tenor of rider behavior, land managers agree, is set by OR advertisements that show the vehicles slashing through pristine surroundings: "See those blurred colors streaming by you," says a personal watercraft advertisement. "That's called scenery. Scenery's for saps."

But for the vast majority of Americans who visit the outdoors under their own steam, and who do want scenery, along with a quiet and unscarred landscape, the impact of the new off-road vehicles is profound. On shared trails and waterways, fast-moving ORVs aggressively force hikers, canoeists, and cross-country skiers aside. The ruts the machines make on the land persist anywhere from a month to a decade after the vehicles have departed. The sounds of their engines can be heard up to two miles away in forested landscape, up to six miles away on water or in open desert. Once ORVs arrive in formerly wild or natural places such as the Lost Lake area of Alaska's Chugach National Forest or Utah's Lockhart Basin, they invariably drive out hikers like Larry Steinbrink, along with campers, canoeists, anglers, birdwatchers, and other outdoor visitors whose recreation requires a setting that is natural and more or less undisturbed.

Even in heavily protected and patrolled Yellowstone National Park, nonmotorized winter visitors have long been repulsed by the thousands of snowmobiles that stream through the park. Visitors complain mostly of the machines' heavy exhaust fumes (in a two-stroke engine, 25percent of the fuel is discharged, unburned, into the atmosphere) and of what's come to be known as "buffalo Ping-Pong" -- snowmobilers chasing groups of frightened bison back and forth on snow-packed park roads. (In the last days of the Clinton administration, snowmobile use in Yellowstone was ordered to be phased out by the winter of 2004. It was restored by the Bush administration. Several lawsuits and legal reversals later, the situation is still in flux.)

ORV users are well aware that they are under public scrutiny. In defense, they insist that the problem-causing riders are "just a few bad apples." "I don't quite get the environmentalists' take on the outdoors," says Ed Klim, president of the American Snowmobile Manufacturers' Association. "It's almost like a religion with them. When they see us on our machines at a trailhead, they say, 'Oh no, we don't want you anywhere near us in the outdoors!' But we say, 'You want to cross-country ski? Fine, we're glad to share the trails.' We snowmobilers don't give a shit who's out there with us. We just want to have fun!"

There are indeed ORV groups that stress lawful behavior, on-trail manners, and environmental good deeds. Montana's Trail Vehicle Rider's Association encourages its more than 300 dirt bikers and ATV-ers to ride their machines at modest speeds and only on legal trails, to quietly pull their vehicles off-trail whenever they meet hikers or horseback riders, and to remove their helmets and goggles so as to look less like space invaders. It also instructs members to wash down their vehicles before riding into the

backcountry (to prevent the spread of alien weed seeds into alpine meadows) and to spend several days each summer repairing ORV trail damage. "I'm persuaded that, given the opportunity and direction, riders will do the right thing," says the association's former president Russ Ehnes. Environmentalists tend to regard such intentions and deeds as political nods, too little and too late. Even the most reform-minded ORV clubs regularly petition to have more public land devoted to motorized use, they point out; and only a tiny fraction of the nation's ORV users consent to belong to such clubs in the first place, because it curbs their independence.

Across the country, land managers regret giving off-road vehicles a foothold. "Back in 1974," says Tom Clifford, supervisor of Montana's Helena National Forest, "a Forest Service old-timer, Lee Redding, warned a bunch of us young foresters about these new machines. We were sending out the wrong message, he said, letting them ride wherever they wanted. But none of us took him seriously. We thought we were supposed to accommodate what the public wanted and that we had more than enough land to satisfy everybody. Now I suddenly realize we don't have enough land. If all our visitors were backpackers or canoeists, going quietly along at two or three miles an hour and making a minimal impact on the land, sure, we'd still have enough room for everybody to do his own thing. But a rider on one of today's off-highway vehicles has a far greater radius of travel and sound. We've opened up a Pandora's box, and we're not sure yet how to get it closed."

Closing it, environmentalists feel, is mostly a matter of enforcing existing law. In regulating ORVs, all federal land-managing agencies are bound by two executive orders - one issued by President Nixon, in 1972, one by President Carter, in 1977. Together, they direct the agencies to monitor the impacts of off-road vehicles upon the land, and to permit or deny ORV use based on these periodic evaluations.

But in a 2000 study of snowmobile and personal watercraft use (ATV and dirt bikes were not studied), Congress's General Accounting Office discovered that 60 percent of the federal land units it surveyed had not collected any information at all on the impacts of ORVs. Without the required monitoring, the accounting office concluded, the agencies "are not in compliance with [the] Executive Orders" and "have no assurance that they are fulfilling their responsibilities to protect their units' resources and environment from adverse effects." Indeed, only a handful of the state and federal land areas originally traversed by off-road vehicles, either legally or illegally, have since been closed to them.

Few land managers believe that ORVs can be completely removed from public land. Several states, including California, have recently begun to spend a larger portion of their ORV budgets on law enforcement and a smaller portion on trail construction for the vehicles. To control spread of the machines on its 2.1 million acres of state forest land, Pennsylvania now provides roughly \$750,000 in annual matching grants to local governments and private entrepreneurs willing to create AT trails on already-scarred land such as abandoned gravel pits and strip-mines.

"We're trying to create a reasonable solution to a tough problem," says Michael DiBerardinis, Pennsylvania's Secretary of Conservation and Natural Resources. "Off-highway vehicle use is growing, but so is our citizens' reluctance to encounter these machines on public land. We're going to subsidize good, challenging trails for them where they'll help local economies, do minimal damage to the environment, and won't interfere with other visitors."



Local Larry Steinbrink near the scenic, once-serene Tinker's Cave in Wayne National Forest. Now it's overrun by ORVs.

Russ Ehnes, who is also executive director of the National Off-Highway Vehicle Conservation Council, does not like the sound of a plan that limits riders' scenic horizons. "There's no reason we should be shunted off into secondary locations," he says.

Adena Cook, public lands consultant to the Blue Ribbon Coalition, an Idaho lobby group, argues that, especially with an aging U.S. population, ORVs are the only way to give senior citizens access to the wilds they hiked as youngsters. "Now that they're Grandma and Grandpa, what are you going to do with them," she poses, "bring them out to the mountains on a soft-tired ATV, or force them to stay at home?"

Larry Steinbrink briefly ponders that question. "As a grandpa," he says, "it's the vehicles that are keepin' me out of the mountains these days. That's what people should be thinkin' about, instead of worryin' 'what might happen if I get too old and sick to walk... But if that day comes, and somebody offers to haul me outdoors on one of those damn machines, I'd tell him, 'No thanks. I'd rather be dead.'"

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